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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,509	09/16/2003	Norio Makiyama	242729US0CONT	1357
22850	7590	11/30/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			BUTLER, PATRICK	
			ART UNIT	PAPER NUMBER
			1732	
DATE MAILED: 11/30/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/662,509	MAKIYAMA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Patrick Butler	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15 and 17-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15 and 17-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/880116.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

The Applicant's Amendments and Accompanying Remarks, filed 12 September 2005, have been entered and have been carefully considered. No claims are new, Claims 15 and 17 are amended, Claim 16 is canceled, and Claims 15 and 17-26 are pending.

Despite these advances, the invention as currently claimed is not found to be patentable for reasons herein below.

The Text of those sections of Title 35, US Code not included in this action can be found in a prior Office Action.

### ***Claim Rejections - 35 USC § 103***

Claims 15 and 17-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owaki (5,226,955) in view of Ashida et al (5,503,899).

With regard to claim 15, Owaki teaches a method of producing a magnetic recording medium (abstract) which includes polishing/texturing the surface of the magnetic recording medium by abrasively contacting the surface with a suede type polishing pad (column 3, lines 51-60), but does not teach the specific characteristics of the pad. Ashida et al teach a suede-like sheet which is useful in making cloths (abstract). The cloth is composed of fiber bundles composed of fine fibers (A), having a fineness of 0.02-0.2 denier (0.022 dtex – 0.22 dtex) which extend through the entire sheet, which includes to a depth of 1/3 in the thickness direction from the napped surface of the sheet, and microfine fibers (B), having a fineness of not more than 1/5 the

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denier or 0.004-0.04 denier (0.004-0.04 dtex) of said fine fibers, an elastomeric polymer and has a fibrous nap on its surface (abstract). The elastomeric polymer is of high molecular weight and is impregnated into the nonwoven fabric and coagulated (column 6, lines 6-34) creating a porous state. The substrate has a napped surface on at least one of the sides of the sheet composed chiefly of the fine and microfine fibers (column 6, lines 52-57). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the suede pad taught by Ashida et al in the process taught by Owaki. The motivation to do so would have been to select a suede product useful for making cloths (Ashida et al, abstract) and one that would be resistant to pilling (Ashida et al, column 1, lines 1-4).

Ashida et al teach a fabric identical in composition to the fabric claimed in claim 1. Therefore, it is reasonable to presume that the wet elastic modulus of the high-molecular elastomer is 0.05 to 0.95 kg/mm<sup>2</sup> is inherent to Ashida et al. Support for said presumption is found in the use of like materials (i.e. a cloth composed of fiber bundles composed of fine fibers and microfine fibers, an elastomeric polymer impregnation and has a fibrous nap on its surface) that would result in the claimed property. The burden is upon the applicant to prove otherwise *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a wet elastic modulus of the high-molecular elastomer is 0.05 to 0.95 kg/mm<sup>2</sup> and would obviously have been present once the Ashida product is provided. In the present invention, one would have been motivated to have a wet elastic modulus as described to ensure a flexible cloth.

With regard to claim 17, Ashida et al teach that the high-molecular elastomer can be a polyurethane produced from at least one polymer diol having an average molecular weight of 500-3,000, at least one diisocyanate and at least one low molecular weight compound having at least two active hydrogen atoms such as ethylene glycol (column 6, lines 6-21). Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a cloth with the polyurethane composition having a mole ratio of polymer diol species and diisocyanate being 1/1.5 – 1/5, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to have the mole ratio within the stated range to have an appropriately elastic polyurethane.

With regard to claims 18-20, Ashida et al teach that the fine fibers (A) and the microfine fibers (B) can both be made of polyamides such as 6-nylon and 66-nylon or polyesters (column 3, lines 7-16).

With regard to claim 21, Ashida et al teach that the microfine fibers (B) have a fineness of not more than 1/5 the denier of the fine fibers (A), or 0.004-0.04 denier (0.004-0.04 dtex) (abstract).

With regard to claim 22, Ashida et al teach in examples 1 and 2 that the thickness of the sheet is 1.2 mm (columns 7 and 9).

With regard to claim 23, Ashida et al teach a fabric identical in composition to the fabric claimed in claim 1, but do not state the desired density of the fabric. However, it would have been obvious to one having ordinary skill in the art at the time the invention

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was made to have a cloth with an apparent density within the range of 0.2 to 0.6 g/cm<sup>3</sup>, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to adjust the density to the claimed range in order to create a light-weight but substantial cloth.

With regard to claim 24, Ashida et al teach that the amount of the polyurethane composition in the fibrous substrate is within the range of 10 to 50% by weight (column 6, lines 29-32).

With regard to claim 25, Ashida et al teach that the ultrafine fibers (A) have a fineness of 0.02-0.2 denier (0.022 dtex – 0.22 dtex) and the ultrafine fibers (B) have a fineness of not more than 1/5 the denier, or 0.004-0.04 denier (0.0044-0.044 dtex) (abstract). It should be noted that the ranges for ultrafine fibers (A) and (B) have an overlapping range of 0.022-0.044 dtex. Therefore, in one embodiment, the ultrafine fibers (A) and (B) can have the same fineness.

With regard to claim 26, Ashida et al teach that the ultrafine fibers (A) have a fineness of 0.02-0.2 denier (0.022 dtex – 0.22 dtex) and the ultrafine fibers (B) have a fineness of not more than 1/5 the denier, or 0.004-0.04 denier (0.0044-0.044 dtex) (abstract). Therefore, in one embodiment, it is possible to have the ultrafine fibers (A) and (B) with a fineness range as claimed by the applicant.

### ***Response to Arguments***

Applicant's arguments filed 12 September 2005 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC 103 rejections. Applicant's arguments appear to be on the grounds that:

1) Owaki does not teach how to make the polishing pad nor does it teach the physical characteristics.

2) Ashida does not lead the skilled artisan to the texturized material of the present process so that the combined references are not believed to suggest the invention as claimed because Ashida does not use the suede material as a polishing pad, the suede material is used for clothing, pouches, shoes, and the like, and the important elastic wet modulus is not explicitly taught.

The Applicant's arguments are addressed as follows:

1 and 2) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Ashida teaches the physical characteristics, and Owaki teaches using the material for polishing. As they are combined, the applicant's invention is read on.

2) Because Ashida's invention is fabric, it has all of the obvious uses of fabric—clothing pouches, shoes, and the like. However, this does not prevent using it for the reason taught by Owaki. Owaki teaches the use and what kind of fabric to use while Ashida fulfills the requirements of the properties and contains the motivation for using Ashida's fabric, which is that the fabric is useful for making cloths (Ashida et al, abstract) and would be resistant to pilling (Ashida et al, column 1, lines 1-4).

Moreover, it is noted that in the Abstract of Ashida, it says "cloths." Possibly, this was misquoted as "clothing" in the Remarks filed as a form of the word clothes, which would be more towards apparel than fabric. Since the Abstract says "cloths", the use of the material as a fabric, and not just apparel as the end use, is reinforced. Regardless, "cloths" is noted in the Abstract.

In response to applicant's argument that the important property of wet elastic modulus is important and is the reason for having the fabric of Ashida, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

While it is acknowledged the wet elastic modulus property is important, the Ashida's material is relied upon to achieve this important property. A different motivation than applicant for reaching the point of having a fabric with this property does not discount the presence of the property.

Moreover, as noted previously, the composition and structure in the Ashida reference are the same as the one claimed, therefore, the properties must be the same. It is reasonable to presume that the wet elastic modulus of the high-molecular elastomer is 0.05 to 0.95 kg/mm<sup>2</sup> is inherent to Ashida et al. Support for said presumption is found in the use of like materials (i.e. a cloth composed of fiber bundles composed of fine fibers and microfine fibers, an elastomeric polymer impregnation and has a fibrous



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nap on its surface) that would result in the claimed property. The burden is upon the applicant to prove otherwise In re Fitzgerald 205 USPQ 594.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is 571-272-8517. The examiner can normally be reached on Monday through Friday 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 571-272-1196. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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